STATE OF CALIFORNIA

California Energy Commission

Minutes of the June 29, 2011, Energy Commission Business Meeting.

The meeting was called to order by Chair Robert B. Weisenmiller. The Pledge of Allegiance was lead by Chair Weisenmiller.

Present:

Robert B. Weisenmiller, Chair James D. Boyd, Vice Chair

Karen Douglas, Commissioner Carla J. Peterman, Commissioner

- 1. CONSENT CALENDAR. (Items on the Consent Calendar will be taken up and voted on as a group. A commissioner may request that an item be moved and discussed later in the meeting.)
 - a. CITY OF EMERYVILLE. Possible approval of Amendment 1 to Agreement CBG-09-91 with the City of Emeryville to extend the term of the grant to June 14, 2012, and reallocate \$30,839 from the materials/supplies category to non-labor contract expense category. The amendment will streamline the purchase and installation of streetlights and allow the work to be performed under a single contract. There is no change in the amount of the grant. Contact: Amir Ehyai.
 - b. CITY OF MONTEREY. Possible approval of Amendment 1 to Loan Agreement 015-09-ECE-ARRA with the City of Monterey to change the scope of its streetlight project, reduce the loan amount by \$41,408, extend the term of the agreement to March 31, 2012. The new maximum loan amount is \$1,510,510. The city will upgrade its streetlights to LED lighting instead of the originally proposed induction lighting. The total annual savings to the city is 907,120 kilowatt hours or \$118,327 annually, with a simple payback estimated to be 12.8 years based on the loan amount. (ARRA funding.) Contact: Joji Castillo.
 - c. LAWRENCE LIVERMORE NATIONAL LABORATORY. Possible approval of Amendment 1 to Contract 500-09-005 with the U.S. Department of Energy, Lawrence Livermore National Laboratory (LLNL), to change the performing institution to Lawrence Berkeley National Laboratory (LBNL). This novation agreement is requested because the principal investigator has relocated from LLNL to LBNL. The amendment includes a six-month no-cost time extension. Contact: Elizabeth Keller.

Item C was voted on as a separate item as Commissioner Peterman recused herself from the vote.

Commissioner Boyd moved and Commissioner Douglas seconded approval of Item C. The vote was unanimous. (3-0)

- d. E SOURCE COMPANIES LLC. Possible approval of Contract 500-10-066 for \$17,900 with E Source Companies LLC to provide one-year access to E Source Technology Assessment Services. This includes on-line access to a full library of energy efficiency technologies, member inquiry and research privileges on specific technologies, and participation in Web conferences on energy technologies. (PIER electricity funding.) Contact: David Weightman.
- e. C&G TECHNOLOGY SERVICES, INC. Possible approval of Purchase Order 10-409.00-010 for \$35,000 with C&G Technology Services, Inc., to upgrade the Internet-

based version of the California Utility Allowance Calculator (CUAC). The CUAC is a tool that allows energy analysts to develop utility allowance estimates for tenants of affordable housing projects that reflect the value of energy efficiency and renewable generation measures for that project. (ERPA funding.) Contact: Adrian Ownby.

Chair corrected amount of Purchase Order to \$34,974.

f. CITY OF MOUNTAIN VIEW. Possible approval of the City of Mountain View's locally adopted building energy standards to require greater energy efficiency than the 2008 Building Energy Efficiency Standards. Contact: Joe Loyer.

Commissioner Douglas moved and Commissioner Boyd seconded approval of Consent items a, b, d, e, and f. The vote was unanimous. (4-0)

2. CITY OF HAYWARD. Possible approval of Agreement 002-10-ECA for a \$887,152 loan to the City of Hayward for energy projects at seven city-owned facilities. The projects include lighting systems upgrades and solar PV panel installation. When completed, the projects are estimated to reduce the city's annual energy consumption by 671,814 kilowatt hours and save the city \$98,186 annually with a simple payback estimated at 9 years based on the loan amount. (ECAA funded.) Contact: Amir Ehyai. (5 minutes)

Commissioner Douglas moved and Commissioner Peterman seconded approval of Agreement 002-10-EC. The vote was unanimous. (4-0)

3. DEPARTMENT OF FINANCE/OFFICE OF STATE AUDITS AND EVALUATIONS. Possible approval of Contract 200-10-011 for \$360,000 with the Department of Finance, Office of State Audits and Evaluations, to provide professional auditing services. The Department of Finance will perform an annual financial statement audit of the Renewable Resources Trust Fund as mandated by Public Resources Code 25751(g). The audit report is to be provided to the Legislature no later than March 1 of each year for which the article is operative. (RRTF funding.) Contact: Mary Lam. (5 minutes)

Commissioner Boyd moved and Commissioner Peterman seconded approval of Contract 200-10-011. The vote was unanimous. (4-0)

4. BRUCE WILCOX, P.E. Possible approval of Contract 400-10-016 for \$1.2 million with Bruce Wilcox, P.E. for residential building energy science to implement the 2013 Residential Building Energy Efficiency Performance Standards. (ERPA funding.) Contact: Martha Brook. (5 minutes)

Commissioner Douglas moved and Commissioner Boyd seconded approval of Contract 400-10-016. The vote was unanimous. (4-0)

5. ARCHITECTURAL ENERGY CORPORATION. Possible approval of Contract 400-10-015 for \$1.2 million with Architectural Energy Corporation for nonresidential building energy science to implement the 2013 Nonresidential Building Energy Efficiency Performance Standards. (ERPA funding.) Contact: Martha Brook. (5 minutes)

Commissioner Douglas moved and Commissioner Peterman seconded approval of Contract 400-10-015. The vote was unanimous. (4-0)

6. CALIFORNIA INSTITUTE FOR ENERGY AND ENVIRONMENT. Possible approval of Amendment 5 to Contract 500-01-043 with the Regents of the University of California, California Institute for Energy and Environment, to add \$2,522,048 and a time extension of 30 months to

continue development of enabling technologies for smart grid and the integration of renewable energy technologies. (PIER electricity funding.) Contact: Pedro Gomez. (5 minutes)

Commissioner Boyd moved and Commissioner Douglas seconded approval of Contract 500-01-043. The vote was unanimous. (4-0)

7. KENNETH B. MEDLOCK III. Possible approval of Amendment 1 to Contract 800-09-001 with Kenneth B. Medlock III, Ph.D. to add \$100,000 and a one-year time extension to March 31, 2013. The additional funds will be used to implement new scenarios in the World Gas Trade model that capture national policy changes, such as green house gas restrictions on shale gas production. (ERPA funding.) Contact: Ruben Tavares. (5 minutes)

Commissioner Peterman moved and Commissioner Boyd seconded approval of Amendment 1 to Contract 800-09-001. The vote was unanimous. (4-0)

8. CALIFORNIA AIR RESOURCE BOARD. Possible approval of Contract 800-10-002 to accept \$100,000 from the California Air Resources Board to support technical analyses required to satisfy the electric reliability assessment elements of Assembly Bill 1318 (Pérez, Chapter 285, Statutes of 2009). The Energy Commission will use these funds to augment contract 400-07-032 with Aspen Environmental Group (Aspen). Aspen and its subcontractors will help translate preferred electricity policies into inputs for power flow and stability analyses. Contact: Mike Jaske. (5 minutes)

Chair Weisenmiller recused himself this item.

Commissioner Douglas moved and Commissioner Peterman seconded approval of Contract 800-10-002. The vote was unanimous. (3-0)

9. ASPEN ENVIRONMENTAL GROUP. Possible approval of Contract 800-10-001 for \$2.4 million with Aspen Environmental Group for technical support and training for the Electricity Supply Analysis Division. The technical assistance will be in five core areas: electricity system and infrastructure analysis; demand forecast methods; other demand analyses such as customer-side generation and quantifying energy efficiency; natural gas; and central station and distributed generation development. (ERPA funding.) Contact: Sylvia Bender. (5 minutes)

Chair Weisenmiller recused himself this item.

Commissioner Peterman moved and Commissioner Douglas seconded approval of Contract 800-10-001. The vote was unanimous. (3-0)

10. LAYMAN ENERGY ASSOCIATES, INC. Possible approval of Agreement GEO-10-002 for a grant of \$2,377,364 to Layman Energy Associates, Inc., with approval at this time of only Phase I of the proposed activities. Phase I generally involves administrative activities, design work, and other preparatory activities. After consideration of the first phase results, the Energy Commission may approve Phase II, which involves drilling and testing an exploratory geothermal well to confirm the presence of a new commercially productive resource in the Geysers steamfield. (GRDA funding). Contact: John Hingtgen. (5 minutes)

Commissioner Douglas moved and Commissioner Boyd seconded approval of Agreement GEO-10-002. The vote was unanimous. (4-0)

11. IMAGEAIR, INC. Possible approval of Agreement GEO-10-001 for a grant of \$672,234 to Imageair, Inc. to create a baseline of surface deformation at the sites of current and planned geothermal plants in the Imperial Valley. The project will use remote sensing data from satellites and apply advanced interferometric synthetic aperture radar (InSAR) techniques. (GRDA funding.) Contact: Pablo Gutierrez. (5 minutes)

Commissioner Boyd moved and Commissioner Peterman seconded approval of Agreement GEO-10-001. The vote was unanimous. (4-0)

12. RENOVITAS, LLC. Possible approval of Agreement GEO-10-003 for a grant of \$1,492,722 to Renovitas, LLC, with approval at this time of only Phase I of the proposed activities. Phase I generally involves administrative activities, data gathering, and the preparation of various maps and studies. After consideration of the first phase results, the Energy Commission may approve Phase II, which involves drilling exploratory wells to ascertain if there is sufficient geothermal potential to support the development of a 50 megawatt power plant. (GRDA funding.) Contact: Pablo Gutierrez. (5 minutes)

Commissioner Boyd moved and Commissioner Peterman seconded approval of Agreement GEO-10-003. The vote was unanimous. (4-0)

13. SIMBOL, INC. Possible approval of Agreement GEO-10-004 for a grant of \$949,545 to Simbol, Inc., to develop one or more processes to extract potassium from geothermal brines and convert it to a cost-competitive, marketable form. (GRDA funding.) Contact: Pablo Gutierrez. (5 minutes)

Commissioner Boyd moved and Commissioner Douglas seconded approval of Agreement GEO-10-004. The vote was unanimous. (4-0)

14. PLEXOS SOLUTIONS LLC. Possible approval of Purchase Order 10-435.01.29 for \$102,700 with PLEXOS Solutions LLC to renew the Energy Commission license for the software and the Western Electricity Coordinating Council (WECC) database for the PLEXOS Solutions production cost model. The model is used to study the electricity system dispatch under various generation, transmission and demand policy scenarios, and allows the Electricity Analysis Office to identify key uncertainties that should be considered for electricity system planning studies. (ERPA funding.) Contact: Ivin Rhyne. (5 minutes)

Commissioner Peterman moved and Commissioner Douglas seconded approval of Purchase Order 10-435.01.23. The vote was unanimous. (4-0)

15. ALAMEDA-CONTRA COSTA TRANSIT DISTRICT. Possible approval of Contract 600-10-013 for \$3 million with Alameda-Contra Costa Transit District to design and construct a hydrogen bus fueling station at its Seminary Avenue location in Oakland, California. (ARFVT funding.) Contact: Tobias Muench. (5 minutes)

Commissioner Boyd moved and Commissioner Peterman seconded approval of Contract 600-10-013. The vote was unanimous. (4-0)

16. BIOSTAR SYTEMS LLC. Possible approval of Agreement ARV-10-049 for a grant of \$3,372,314 to BioStar Systems LLC to produce pipeline quality biomethane from dairy waste and food processor waste. The biomethane will be converted to natural gas to support the Sonoma County Transit fleet. (ARFVT funding.) Contact: Rhetta deMesa. (5 minutes)

Commissioner Boyd moved and Commissioner Peterman seconded approval of Agreement ARV-10-049. The vote was unanimous. (4-0)

17. CR&R, INC. Possible approval of Agreement ARV-10-052 for a grant of \$4,520,501 to CR&R, Inc., to produce pipeline quality biomethane from nonrecyclable inert waste using a two-stage anaerobic digestion process. (ARFVT funding.) Contact: Rhetta deMesa. (5 minutes)

Commissioner Boyd moved and Commissioner Peterman seconded approval of Agreement ARV-10-052. The vote was unanimous. (4-0)

18. PIXLEY BIOGAS, LLC. Possible approval of Agreement ARV-10-053 for a grant of \$4,672,798 to Pixley Biogas, LLC, to build an anaerobic digestion facility that will process over 36 million gallons of manure from three nearby dairies and supply the resultant biogas to the adjacent Calgren Renewable Fuels ethanol biorefinery. (ARFVT funding.) Contact: Rhetta deMesa. (5 minutes)

Commissioner Boyd moved and Commissioner Douglas seconded approval of Agreement ARV-10-053. The vote was unanimous. (4-0)

19. USA WASTE OF CALIFORNIA, INC. Possible approval of Agreement ARV-10-050 for a grant of \$489,040 to USA Waste of California, Inc., to upgrade a liquefied natural gas (LNG) station in the city of Corona in Riverside County. The upgrade will allow the site to provide LNG and compressed natural gas from liquefied natural gas by adding storage tanks, vaporizers and dispensers to provide compressed natural gas (CNG) dispensing capabilities in addition to the current LNG dispensing capability. (ARFVT funding.) Contact: Jonah Margolis. (5 minutes)

Commissioner Boyd moved and Commissioner Peterman seconded approval of Agreement ARV-10-050. The vote was unanimous. (4-0)

20. HIGH MOUNTAIN FUELS LLC. Possible approval of Agreement ARV-10-051 for a grant of \$11,020,419 to High Mountain Fuels LLC to demonstrate onsite purification and liquefaction technology to convert renewable landfill biomethane to liquefied natural gas for transportation fuel. (ARFVT funding.) Contact: Joanne Vinton. (5 minutes)

Commissioner Boyd moved and Commissioner Peterman seconded approval of Agreement ARV-10-051. The vote was unanimous. (4-0)

21. SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. Possible approval of Agreement ARV-10-054 for a grant of \$2.6 million to South Coast Air Quality Management District to install and upgrade 11 compressed natural gas (CNG) and liquefied natural gas (LNG) stations in the South Coast Air Basin. (ARFVT funding.) Contact: Pilar Magana. (5 minutes)

Commissioner Boyd moved and Commissioner Peterman seconded approval of Agreement ARV-10-054. The vote was unanimous. (4-0)

22. GUIDELINES FOR SOLAR ELECTRIC INCENTIVE PROGRAMS. Possible approval of proposed revisions to the *Guidelines for California's Solar Electric Incentive Programs*. These guidelines establish eligibility criteria, conditions for incentives, and equipment rating standards for all ratepayer-funded solar electric programs in California. The proposed guideline revisions are limited in nature and clarify and revise the accuracy requirements for inverter-integrated performance meters. Contact: Patrick Saxton. (5 minutes)

Item 22 was deferred to July 13, 2011 Business Meeting.

23. CLEAN ENERGY PARTNERSHIP ACADEMY – ORDER INSTITUTING RULEMAKING. Possible approval of an order instituting a rulemaking proceeding to develop and adopt guidelines in consultation with the Department of Education under Education Code sections 54698-54699, 1, (SB x1 1, Steinberg, Chapter 2, Statutes of 2011). The guidelines will ensure that school programs receiving Clean Energy Partnership Academy grants reflect current state energy policies and priorities, as well as provide skills and education linked to the actual needs of relevant industries. Contact: Craig Hoellwarth. (5 minutes)

Commissioner Douglas moved and Commissioner Peterman seconded approval for an order instituting a rulemaking proceeding to develop and adopt guidelines in consultation with the Department of Education under Education Code sections 54698-54699, 1, (SB x1 1, Steinberg, Chapter 2, Statutes of 2011). The vote was unanimous. (4-0)

24. **Minutes:** Possible approval of the June 20, 2011, Business Meeting Minutes.

Commissioner Boyd moved and Commissioner Douglas seconded approval of the June 20, 2011, Business Meeting Minutes. The vote was unanimous. (4-0)

25. Commission Committee Presentations and Discussion:

Vice Chair Boyd represented the Energy Commission at Air Resources Board for a meeting that was scheduled for 2 hours and lasted for 3 on fuel cells and hydrogen cells. Pleased that we were invited to discuss AB 118.

Commissioner Douglas attended a meeting in with LA County Planning Commission regarding DRCEP and solar energy planning.

Chair Weisenmiller was at a meeting on Friday at the Silicon Valley Energy Summit. He and Mary Nichols did a joint presentation which was well received. Also was in San Diego at the Sustainable Energy Summit.

- 26. **Chief Counsel's Report:** None.
- 27. **Executive Director's Report:** None.
- 28. **Public Adviser's Report: None.**
- 29. **Public Comment: None.**
- 20. Internal Organization and Policy: None.

Appearances:

Mr. Daryl Maas, Project Manager, Pixley Biogas, LLC

Mr. Paul Relis, Vice President, CR&R, Inc.

Mr. John Nabb, Manager, Biostar Systems, LLC

Mr. Jamie Levin, Alameda-Contra Costa Transit District

Mr. Chuck White, Director, USA Waste of California

There being no further business, the meeting was adjourned.

Respectfully submitted,

LANA MCALLISTER
Acting Secretary to the Commission